

**REMARKS**

Claims 1-16 are all the claims pending in the application. Claims 1 and 14 are being amended.

**I. Claim Rejections Under 35 U.S.C. § 103**

The Examiner rejected claims 1, 8-10 and 13-14 under 35 U.S.C. § 103(a) as being unpatentable over Nong (US 2003/0123468) in view of Merchant, et al. (US 5,408,463).

**Claim 1**

The Applicant herein amends claim 1 to clarify that the memory unit is organized as a number of physical memory queues, where each queue is “physically arranged so that it is physically assigned to an output port.” Support for the amendment is found on pp. 4-5 of the Specification, which states that the idea of the inventive embodiment is “to realize the queues by hardware instead,” where the invention “really aligns queues physically in concrete memory blocks of a compact memory module towards single outputs.” Fig. 3 further illustrates how the memory queues (22) are physically arranged into concrete memory blocks such that each memory queue *physically* corresponds to a specific output port (25).

Neither Nong nor Merchant, taken alone or in combination, disclose where a memory unit contains a number of memory queues that are *physically* arranged so that they are *physically assigned* to an output port. The Examiner admits that Nong fails to disclose a single memory unit organized as a number of physical memory queues, but states that Merchant et al. teach a single buffer memory unit where each individual input corresponds to a corresponding queue,

which, on a one-to-one basis, outputs to a corresponding output of the buffer memory unit. *Final Office Action*, p. 4. However, the “one-to-one” correspondence in Merchant—from input to queue to output—is not a physical correspondence based on a physical arrangement of the hardware of the memory queue, but rather a software-created correspondence set up by the local bus and network that reconfigures and reassigns various inputs, queues and outputs as needed. The arrangement in Merchant creates bottlenecks and is limited in its manageable capacity.

As mentioned above, Fig. 3 illustrates how the memory queues (22) are physically arranged into concrete memory blocks such that each memory queue *physically* corresponds to a specific output port (25). Merchant does not disclose where its memory queue is *physically arranged* to correspond to a single output, as any correspondence between any input, queues and outputs is not physically carried out, but managed by a controller or processor.

For at least these reasons, the Applicant submits that Nong and Merchant, taken alone or in combination, fail to teach the elements of claim 1, where each queue is “physically arranged so that it is physically assigned to an output port.”

**Claim 14**

The Applicant herein amends claim 14, directed to the method for routing/switching data, to further clarify that in the method step of “queuing said data in a plurality of memory queues constituting a memory unit,” “each memory queue is physically arranged so that it is physically assigned to an output port.”

The Applicant refers the Examiner to the arguments presented above with regard to claim 1, and submits that claim 14 is allowable for at least the same reasons.

**Claim 5**

The Examiner rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Nong (US 2003/0123468) in view of Merchant, et al (US 5,408,463), as applied to claim 1, and in further view of Knorpp, et al. (US 4,947,387).

The Applicant submits that claim 5 is allowable at least based on its dependency to claim 1, which the Applicant believes is in allowable condition.

**Claims 2 and 15**

The Examiner rejected claims 2 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Nong (US 2003/0123468) in view of Merchant, et al. (US 5,408,463), as applied to claims 1 and 14, and in further view of Bohm, et al. (US 2002/0027816).

The Applicant submits that claims 2 and 15 is allowable at least based on their dependency to claim 1 and claim 14, respectively, which the Applicant believes are in allowable condition.

**Claim 3**

The Examiner rejected claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Nong (US 2003/0123468) in view of Merchant, et al. (US 5,408,463), and Bohm, et al. (US 2002/0027816), as applied to claim 2, and in further view of Strehler (US 5,122,984).

The Applicant submits that claim 3 is allowable at least based on its dependency to claim 1, which the Applicant believes is in allowable condition.

**Claim 4**

The Examiner rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Nong (US 2003/0123468) in view of Merchant, et al. (US 5,408,463), as applied to claim 1, and in further view of Kothary (US 6,249,528).

The Applicant submits that claim 4 is allowable at least based on its dependency to claim 1, which the Applicant believes is in allowable condition.

**Claim 6**

The Examiner rejected claim 6 under 35 U.S.C. § 103(a) as being unpatentable over Nong (US 2003/0123468) in view of Merchant, et al. (US 5,408,463), and Knorpp, et al. (US 4,947,387), as applied to claim 5, Dooley, et al. (US 2002/0163922).

The Applicant submits that claim 6 is allowable at least based on its dependency to claim 1, which the Applicant believes is in allowable condition.

**Claim 7**

The Examiner rejected claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Nong (US 2003/0123468) in view of Merchant, et al. (US 5,408,463), and Knorpp, et al. (US 4,947,387), as applied to claim 5, and in further view of Fujii, et al. (US 2003/0014264).

The Applicant submits that claim 7 is allowable at least based on its dependency to claim 1, which the Applicant believes is in allowable condition.

**Claims 11 and 12**

The Examiner rejected claims 11 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Nong (US 2003/0123468) in view of Merchant, et al. (US 5,408,463), as applied to claim 1, and in further view of Liebowitz, et al. (US 5,757,784).

The Applicant submits that claims 11 and 12 is allowable at least based on their dependency to claim 1, which the Applicant believes are in allowable condition.

**Claim 16**

The Examiner rejected claim 16 under 35 U.S.C. § 103(a) as being unpatentable over Nong (US 2003/0123468) in view of Merchant, et al. (US 5,408,463), as applied to claim 1, and in further view of Moriwaki, et al. (EP 0,918,419 A2).

The Applicant submits that claim 16 is allowable at least based on its dependency to claim 1, which the Applicant believes is in allowable condition.

**II. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116  
U.S. Appln. No.: 10/699,686

Attorney Docket No.: Q78259

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Scott H. Davison/

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

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Scott H. Davison  
Registration No. 52,800

WASHINGTON OFFICE  
23373  
CUSTOMER NUMBER

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